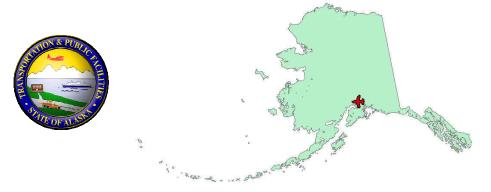


PALMER AIRPORT



2004 Alaska Airport Pavement Condition Report

Scott Gartin, P.E.
State Pavement Engineer
Statewide Materials Section, Alaska DOT&PF
5800 E. Tudor Road

Phone: (907) 269-6244 Fax: (907) 269-6231 Email: scott_gartin@dot.state.ak.us

Maps and report compiled by
H. June Finkbiner
Central Region Materials, Alaska DOT&PF

PALMER MUNICIPAL AIRPORT - 2004

Contents:

- A Pavement Strength Form showing project history, latest Pavement Condition Index (PCI) data, pavement strength ratings (if available) and other useful information
- A Pavement Condition Survey PCI Sample Unit Layout Plan
- PCI maps showing as-measured and predicted pavement conditions
- Age map showing pavement age as of January 2004
- A Branch PCI Condition Report
- A Section PCI Condition Report

Airport Information:

• Location:

Palmer is located just south of the Old Glenn Highway, east of downtown Palmer, Alaska. It is owned and operated by the Municipality of Palmer. This airport primarily serves private aircraft, with a large number of them based there.

District: City of Palmer
 Airport Manager: Jane Dale
 Maintenance Manager: Gred Wickum
 Pavement Surface: Asphalt Concrete

• Last Pavement Construction: 2004

• Pavement layout:

The Palmer Airport is a fairly large airport with two runways and many taxiway and four apron areas. There is over 2.53 million square feet of pavement on the airport that is accounted for in the survey. That is 40 lane-miles or 58.2 acres of hard surfaced areas maintained by the City of Palmer personnel and equipment.

• Design Aircraft: Small Aircraft

• 2003 Enplanements: 98 – down from 172 in 2002

• Airport Class: Non-Primary

• Last pavement condition survey: 2004

Conducted by Scott Gartin of Statewide Materials and Angela Parsons, John Rajek, Roy Stover, and June Finkbiner of Central Region Materials in late May of 2004.

• Next planned pavement condition survey: 2007

- 2004 reported pavement maintenance and/or changed conditions: A paved expansion of Apron A was constructed west of the existing pavement. A new paved Taxiway loop consisting of a new Taxiway J and an extension of Taxiway L was constructed north of and connecting to Taxiway B. Unfortunately all this new paving was done after the pavement condition survey was done.
- **Recommendations:** See PCI maps. Seal cracks that are greater than ¹/₄" wide and patch with hot mix or cold mix as required to maintain serviceability.

Branch Condition Report

Pavement Database: NetworkID: Palmer

Weighted Number of Sum Section Avg Section PCI True Area **Average Branch ID** Use Average **Sections** Length Width Standard (SqFt) **PCI** PCI (Ft) (Ft) Deviation 100 (Taxiway A) 3 5,767.00 50.00 296,970.00 **TAXIWAY** 98.06 98.00 1.41 1000 (Taxiway J) 992.00 37,875.00 **TAXIWAY** 100.00 1 35.00 100.00 0.00 1200 (Taxiway L) 2 545.00 35.00 22,168.00 **TAXIWAY** 89.64 80.50 19.50 1300 (Taxiway M) 200.00 8,410.00 **TAXIWAY** 0.00 59.00 40.00 59.00 1 200 (Taxiway B (Parallel 9/27)) 4 3,266.00 40.00 137,152.00 **TAXIWAY** 69.25 16.47 59.89 2 2,965.00 270,150.00 **TAXIWAY** 74.33 2000 (Taxiway T) 125.00 78.50 14.50 525.00 60.00 31,500.00 **TAXIWAY** 95.00 0.00 95.00 300 (Taxiway C) 1 400 (Taxiway D) 1 540.00 60.00 32,400.00 **TAXIWAY** 85.00 0.00 85.00 1,500.00 **APRON** 0.00 76.00 4100 (Large Aircraft Apron) 1 300.00 450,000.00 76.00 2 **APRON** 84.50 4200 (Apron A and B) 1,300.00 355.00 416,893.00 15.50 80.67 4300 (Apron C) 1 700.00 560.00 392,000.00 **APRON** 72.00 0.00 72.00 4400 (Apron D) 1 700.00 220.00 154,000.00 **APRON** 71.00 0.00 71.00 4500 (Forestry Ramp) 2 930.00 295.50 362,790.00 **APRON** 95.00 0.00 95.00 500 (Taxiway E) 550.00 33,000.00 **TAXIWAY** 1 60.00 94.00 0.00 94.00 125.00 **TAXIWAY** 600 (Taxiway F) 1 60.00 11,750.00 98.00 0.00 98.00 6100 (Runway 16-34) 6,000.00 600,000.00 2 100.00 **RUNWAY** 58.00 1.00 57.33

Branch Condition Report

2 of 3

Pavement Database: NetworkID: Palmer

Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
6200 (Runway 9/27)	1	3,600.00	70.00	252,000.00	RUNWAY	58.00	0.00	58.00
700 (Taxiway G)	1	500.00	60.00	30,000.00	TAXIWAY	83.00	0.00	83.00
800 (Taxiway H)	1	200.00	40.00	8,400.00	TAXIWAY	59.00	0.00	59.00

3 of 3

Date: 3 /23/2005

Branch Condition Report

Pavement Database:

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	7	1,775,683.00	82.57	12.45	79.66
RUNWAY	3	852,000.00	58.00	0.82	57.53
TAXIWAY	19	919,775.00	82.21	17.29	83.36
All	29	3,547,458.01	79.79	16.98	75.31

Section Condition Report

Pavement Database:

NetworkID: Palmer

Last Age Section ID Use PCI **Branch ID** Last **Surface** Rank Lanes True Area Inspection Αt Const. (SqFt) **Date** Inspection **Date TAXIWAY** Ρ 49,250.00 05/27/2004 100 (Taxiway A) 100-01 07/01/2002 AC 0 99.00 100 (Taxiway A) 100-02 07/01/2002 AC **TAXIWAY** Ρ 0 154,820.00 05/27/2004 2 99.00 100 (Taxiway A) 100-03 07/01/2002 AC **TAXIWAY** Ρ 92,900.00 05/27/2004 2 96.00 1000 (Taxiway J) **TAXIWAY** S 1000-01 09/01/2004 AC 0 37,875.00 09/01/2004 0 100.00 1200 (Taxiway L) **TAXIWAY** 1200-01 08/01/1995 AC S 0 5,890.00 05/28/2004 9 61.00 **TAXIWAY** S 1200-02 09/01/2004 AC 0 16,278.00 09/01/2004 0 100.00 1200 (Taxiway L) 1300 (Taxiway M) 1300-01 08/01/1996 AAC **TAXIWAY** Ρ 0 8,410.00 05/28/2004 8 59.00 200 (Taxiway B (Parallel 9/27)) 200-01 08/01/1996 AAC **TAXIWAY** Ρ 43,232.00 05/28/2004 8 60.00 200 (Taxiway B (Parallel 9/27)) **TAXIWAY** Ρ 11,070.00 05/28/2004 200-02 06/01/1996 AAC 71.00 **TAXIWAY** Ρ 200 (Taxiway B (Parallel 9/27)) 200-03 06/01/1996 AAC 69.000.00 05/28/2004 8 51.00 200 (Taxiway B (Parallel 9/27)) **TAXIWAY** Р 95.00 200-04 07/01/2002 AAC n 13,850.00 05/28/2004 2 2000 (Taxiway T) **TAXIWAY** Ρ 173,900.00 05/26/2004 8 2000-01 06/01/1996 AC 64.00 **TAXIWAY** Ρ 2000-02 07/01/2000 AC 96,250.00 05/27/2004 4 93.00 2000 (Taxiway T) Ρ 300 (Taxiway C) 300-01 07/01/2002 AC **TAXIWAY** 0 31,500.00 05/27/2004 2 95.00 **TAXIWAY** Р 32,400.00 05/27/2004 400 (Taxiway D) 400-01 06/01/1980 AC 0 24 85.00 4100 (Large Aircraft Apron) 4100-01 06/01/1996 AC **APRON** S 0 450,000.00 05/28/2004 8 76.00 4200 (Apron A and B) 4200-01 06/01/1996 AC **APRON** S 0 260,000.00 05/26/2004 8 69.00 4200 (Apron A and B) 4200-02 09/01/2004 **APRON** S 156,893.00 09/01/2004 100.00 4300-01 06/01/1996 AC **APRON** S 0 392,000.00 05/26/2004 8 72.00 4300 (Apron C) 4400 (Apron D) 4400-01 06/01/1996 AC **APRON** S 0 154,000.00 05/26/2004 8 71.00 4500 (Forestry Ramp) 4500-01 07/01/2000 AAC **APRON** Ρ 0 338,790.00 05/27/2004 4 95.00 4500 (Forestry Ramp) 4500-02 07/01/2000 PCC **APRON** 0 24,000.00 05/27/2004 4 95.00 Ρ 500 (Taxiway E) 500-01 07/01/2002 AC **TAXIWAY** 0 33,000.00 05/27/2004 2 94.00 07/01/2002 **TAXIWAY** Ρ 11,750.00 05/28/2004 98.00 600 (Taxiway F) 600-01 AC 0 2 06/01/1980 AC **RUNWAY** 0 500,000.00 05/27/2004 6100 (Runway 16-34) 6100-01 24 57.00 6100 (Runway 16-34) 6100-02 06/01/1987 AC **RUNWAY** Р 0 100,000.00 05/27/2004 17 59.00

Section Condition Report

Pavement Database: NetworkID: Palmer

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
6200 (Runway 9/27)	6200-01	06/01/1978	AC	RUNWAY	Р	0	252,000.00	05/27/2004	26	58.00
700 (Taxiway G)	700-01	06/01/1980	AC	TAXIWAY	Р	0	30,000.00	05/02/2001	21	83.00
800 (Taxiway H)	800-01	08/01/1996	AAC	TAXIWAY	Р	0	8,400.00	05/28/2004	8	59.00

Section Condition Report

Pavement Database:

Age Category	Average Age At Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	PCI Standard Deviation	Weighted Average PCI
0-02	1.40	598,116.00	10	97.60	2.24	98.29
03-05	4.00	459,040.00	3	94.33	0.94	94.58
06-10	8.09	1,575,902.01	11	64.82	7.18	70.23
16-20	17.00	100,000.00	1	59.00	0.00	59.00
21-25	23.00	562,400.00	3	75.00	12.75	60.00
26-30	26.00	252,000.00	1	58.00	0.00	58.00
All	7.83	3,547,458.01	29	79.79	16.98	75.31

PAVEMI	ENT STRENG	TH SURV	/EY								
STATE Ala		CITY	Palmer	AIRPORT	Palmer Muni			This is a v	ariation of FA	A Form 5320-1-1	
	CON		JCTION DATES	3							
IDENT.	NAME	ORIG.	OVERLAY	CONSTRUCTION AGENCY	SOURCE OF INFORMATION	Existing Pavement Conditions (PCI) at last inspection RUNWAYS	Subbase Course	Base Course	Surface Course	Overlay	Pavement Strength
	Runway 15-33 (01)										
6100-01	south end to north taxiway	1980		City of Palmer	Ak. Supp., 1997 Consultant Report	57		12"	3" AC		S180
0.000.	Runway 15-33 (02)			only or r annor		<u> </u>			0 710		0.00
6100-02	north taxiway to north end	1987		City of Palmer	Ak. Supp., 1997 Consultant Report	59		12"	3" AC		S180
6200-01	Runway 9-27	1978		City of Palmer	1997 Consultant Report	58		12"	2" AC		not rated/GA
						TAXIWAYS					
100-01	Taxiway A, Sec. 1	2002		City of Palmer		99			AC	Fog Seal 2003	
100-01	Taxiway A, Sec. 2	2002		City of Palmer		99			AC	Fog Seal 2003	
100-03	Taxiway A, Sec. 3	2002		City of Palmer		96			AC	Fog Seal 2003	
1000-01	Taxiway J	2004		City of Palmer	ALP	100*			AC		
1200-01	Taxiway L, Sec. 1	1978		City of Palmer	41.5	61			40		
1200-02 1300-01	Taxiway L, Sec. 2 Taxiway M	2004 1978	1996	City of Palmer City of Palmer	ALP 1997 Consultant Report	100* 59		12"	AC 2" AC	1.5" AC	
2000-01	Taxiway T, Sec. 1	1978	1996	City of Palmer	1997 Consultant Report	64		12"	2" AC	1.5" AC	
2000-02 200-01	Taxiway T, Sec. 2 Taxiway B, Sec. 1	2000 1978	1996	City of Palmer City of Palmer	1997 Consultant Report	93 60		12"	AC 2" AC	1.5" AC	
200-01	Taxiway B, Sec. 1	1978	1996	City of Palmer	1997 Consultant Report	71		12"	2" AC	1.5" AC	
200-03	Taxiway B, Sec. 3	1978	1996	City of Palmer	1997 Consultant Report	51		12"	2" AC	1.5" AC	
200-04	Taxiway B, Sec. 4	1978	2002	City of Palmer		95		12"	2" AC	2" AC	
300-01	Taxiway C	2002		City of Palmer	1007 Canaultant Danart	95		12"	AC	Fog Seal 2003	
400-01 500-01	Taxiway D Taxiway E	1980 2002		City of Palmer City of Palmer	1997 Consultant Report	85 94		12	3" AC AC	Fog Seal 2003	
600-01	Taxiway F	2002		City of Palmer		98			AC	Fog Seal 2003	
700-01 800-01	Taxiway G Taxiway H	1980 1978	1996	City of Palmer City of Palmer	1997 Consultant Report	83 59		12"	AC 2" AC	1.5" AC	
000-01	Tuxiway 11	1370	1550	Only of 1 diffici	1007 Consultant report	- 55			2 710	1.0 7.0	
						ADDONO					
4100-01	Large Aircraft	1996		City of Palmer	1997 Consultant Report	APRONS 76		12"	5" AC		
4200-01	Apron A and B,	1996		City of Palmer	1997 Consultant Report	69		12"	3" AC		
4200-02 4300-01	Apron A and B, Apron C	2004 1996		City of Palmer City of Palmer	ALP 1997 Consultant Report	100* 72		12"	AC 3" AC		
4400-01	Apron D	1996		City of Palmer	1997 Consultant Report	71		12"	3" AC		
4500-01	Forestry Ramp	2000		AK DNR		95 05			AC		
4500-02	Forestry Hard	2000		AK DNR		95			PCC		
REMARKS:		a our con	oumod initi-1 DC	21 of 100							
Area const	ructed after condition	survey - as	sumed mittal PC	JI UI 100.							
		May 27-28,									
Date of Site	Inspection:	2004		Evaluated By:	S. Gartin	3/23/2005					PAGE 1 of 1

